

OPEN LETTERS.

Raising Diatoms.

In reference to your kind words in the April GAZETTE, on my "Raising Diatoms in the Laboratory," I would have been further gratified had the fact been noticed of my experiments of passing the spores through filter paper, that they antedated the experiments of Mr. F. Kitton fully two years. How much of time and care these experiments cost me will never be known. As to your remarks on the March number of the *New York Microscopical Journal*, that its leading articles seem addressed to amateurs, this is in part true of the article which occupies the most space, my lecture, "The Life of a Diatom." The audience was chiefly composed of the families and friends of the members, but unfortunately the part which chiefly interested the members could not be given in print. It was illustrated with the lime-light, and a set of new photographs that would have delighted any botanist, Habirshaw's photograph of *Pleurosigma*, was shown to an audience, with lines a third of an inch thick and beautifully clear. Besides other nice points, a feature of which no mention is made in the printed lecture was the exhibit of lantern slides of Mr. Christian's new and very curious diatoms. As pictures these interested all, but their scientific side could only be seen by the diatomist. This much seems due from me to whom so much space was generously given in the *Journal*, and which could only present it as popular matter.

SAMUEL LOCKWOOD.

Freehold, N. J.

Antidote for *Cicuta* poisoning.

A case came under my observation of a young man who, while suffering from thirst in the hayfield, chewed the root of what he thought was spikenard, *Aralia racemosa*. In less than two hours he became extremely sick. The first sensation experienced was like a stroke on the head, with unconsciousness for a few seconds, followed by sickening nausea. Upon reaching home the mother suspected he had made a mistake in the plant, and not daring to wait to send several miles for a physician she procured a stalk of *Eupatorium perfoliatum*, made a tea of it, and gave freely as warm as could be taken. This assisted nature to relieve the stomach and caused a warmth and moisture of the whole system. In an hour the dangerous symptoms had disappeared. It was discovered that he had chewed and swallowed the juice of more than half of a four ounce root of *Cicuta maculata*. The physicians who afterwards saw the amount of the root which he had taken were surprised at the result.

Harmonsburg, Pa.

J. E. WHITESIDE.

Autumnal blooming of *Oxalis*.

On the 18th of last September, while out on a little excursion along the B. & M. railroad near here, I found quite a patch of *Oxalis violacea* in full bloom by the side of the track. The individual flowers were a little above the ordinary size and several in a cluster, the whole plant seeming to be exceedingly vigorous. However, the strangeness of this freak of autumnal blooming was perhaps equaled by the fact that there was not a

single leaf on the hundred or so plants scattered for some distance along the railroad. The top soil had lately been removed by the section hands and these plants were growing on the south side of the track where the sun shone fairly upon them. Could this removal of the soil, and consequent bringing of the scaly bulbs nearer the surface have induced this very premature blooming? Or could any of the readers of the GAZETTE offer any other explanation in connection with the location of the plants? I expect to keep a watch over these plants this spring to see what they do when the ordinary time for blooming comes.

Hastings, Neb.

HARVEY THOMSON.

Solidago erecta PURSH.

The herbarium of the United States National Museum has for distribution a good number of duplicates of the above species, which has recently been reinstated by Dr. Gray [Proc. Am. Acad. XXII, p. 308]. This form, so well represented in the District of Columbia, has been variously referred by Dr. Gray to *S. bicolor* L., var. *concolor* Torr. & Gray, and *S. speciosa* Nutt., var. *angustata* Torr. & Gray, and may have been so distributed from here, but its distinctness from either of these forms has long been recognized by many Washington botanists.

F. H. KNOWLTON.

Assistant Curator Botany, U. S. Nat. Mus.

An aid in description.

In writing out descriptions it is important to have in mind the range of variations in the size of each organ. With microscopic objects this requires great familiarity with the specimens. A single figure, while it may be typical, can not show the range of variation. As an aid in making up descriptions, and to use for reference, tables like the following, which can be quickly made, have been found convenient. The vertical columns show the length in lines of each organ, while the horizontal rows show at a glance the amount of their variation. Other points can, of course, be added on the same plan, and the number of recorded observations be increased as circumstances require.

Muhlenbergia argentea Vasey. Palmer, Mexico, 1885, No. 160.

Lower empty glume.....	1½	1½	1½	1½	1
Upper empty glume.....	1½	1½	1½	1½	1½
Flowering glume.....	1½	1½	1½	1½	1½
Palet.....	2	1½	1½	1½	1½
Awn of flowering glume.....	5	5	4	2½	2

A. A. CROZIER.

Dep't Agriculture, Washington, D. C.

Exploration of San Domingo.

Baron Eggers has been engaged by the undersigned, and under the patronage of the Royal Academy of Sciences at Berlin, to undertake a journey of botanical research in the higher mountain regions of San Domingo that have not yet been explored. The plants to be collected will be distributed in two series with corresponding numbers. The first series will embrace only such plants as have not already been distributed in Eggers' *Flora Indiæ occidentalis exsicc.*, and will cost forty marks per